

Serial No. **10/829,209**
Amdt. dated **October 17, 2007**
Reply to Office Action of **July 18, 2007**

Docket No. **K-0632**

REMARKS/ARGUMENTS

Claims 11, 20, 21, 23-26, 29-34, 37 and 40-46 are pending in this application. By this Amendment, claims 11, 20, 21, 23-26, 29 and 32-34 are amended, claims 42-46 are added, and claims 22, 36, 38 and 39 are canceled without prejudice or disclaimer. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

I. Rejections Under 35 U.S.C. §102

A. Im

The Office Action rejects claims 11, 20-26, 29-34, 36-38 and 40 under 35 U.S.C. §102(b) over Im et al., U.S. Patent Publication No. 2002/0067117 (hereinafter "Im"). Claims 22, 36 and 38 have been cancelled. This rejection, in so far as it applies to the remaining claims, is respectfully traversed.

Independent claim 11 is directed to a mask for use during deposition of a luminescent layer of an organic electroluminescent device. The mask includes a plurality of holes aligned uniformly and in parallel to each other along an axis of the mask. An entire inner circumferential edge of each of the plurality of holes is formed by first and second angled surfaces. Independent claim 29 recites similar features in varying scope.

Applicant maintains the previously established position that the tension mask assembly disclosed by Im is non-analogous art, and thus is not properly applied in a rejection of the

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present application. One of ordinary skill in the art simply would not look to a shadow mask specifically designed for permanent use in a CRT when developing a mask for use in the deposition of a luminescent layer in an organic electroluminescent device. Thus, it is once again respectfully submitted that Im's shadow mask is not comparable to the claimed mask. However, even if improperly applied, Im neither discloses nor suggests the features of independent claims 11 and 29, or the respective claimed combinations of features.

Im discloses various embodiments of a tension mask assembly for a CRT. The tension mask assembly 10 shown in Figure 1-2 of Im is made of a metal foil 11, and includes a plurality of slots 13 formed between a plurality of strips 12. "Real" bridges 14 support the slots 13, and "dummy" bridges 15 extend into the slots 13 from one side to the slot 13 to reduce a width of the slot 13 at that point. In the embodiment shown in Figures 2-3 of Im, the dummy bridges 35 extend into the slot 33 from opposite sides of the slot 33 to achieve the desired narrowing.

In each of the embodiments disclosed by Im, the mask assembly 10 appears to have a uniform thickness. Im neither discloses nor suggests that a thickness of any of the bridges 14, 15 or 35 is less than a thickness of the mask in other areas. Thus, Im neither discloses nor suggests the features of independent claims 11 and 29, or the respective claimed combinations of features.

Accordingly, it is respectfully submitted that independent claims 11 and 29 are not anticipated by Im, and thus the rejection of independent claims 11 and 29 under 35 U.S.C. §102(b) over Im should be withdrawn. Rejected dependent claims 20, 21, 23-26, 29-34, 37 and

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40, as well as newly added claims 42-46, are allowable at least for the reasons set forth above with respect to independent claims 11 and 29, from which they respectively depend, as well as for their added features.

For example, the slots 33 disclosed by Im do not include first and second angled surfaces as specifically recited in newly added dependent claims 43, 44 and 46. As shown in Fig 4A of Im, the edge of the slot 33 where the bridge 35 extends inward has an upper angled surface and a lower angled surface that are formed by etching so as to avoid a clipping phenomenon. At the bridge portion of the slot 33, the lower angled surface is more etched than the upper angled surface to achieve the desired beam pass through path at this point in the slot 33 (see paragraph 41 of Im). In contrast, at a portion of the slot 33 where the bridge 35 is not formed, the lower angled surface is less etched than the upper angled surface to achieve the desired beam pass through path at these remaining portions of the slot 33 (see paragraph 40 of Im). Thus, the orientation of the inner circumferential edge of the slot 33 is irregular based on a particular location along the edge of the slot 33 in order to achieve the desired pass through path. This is also the case for the embodiment shown in Figures 7-10 of Im.

In contrast, the first and second angled surfaces that form the inner circumferential edges of the plurality of holes recited in independent claim 11 each extend along an entire inner circumferential edge of each of the holes to form a uniformly shaped edge. Im neither discloses nor suggests that any of the disclosed embodiments includes holes or slots having first and second angled surfaces as specifically recited in independent claims 11 and 29.

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B. Kim

The Office Action rejects claims 11 and 36-39 under 35 U.S.C. §102(a) over Kim, U.S. Patent Publication No. 2003/0011299 (now U.S. Patent No. 6,884,139, hereinafter "the Kim '139 patent"). Claims 36, 38 and 39 have been cancelled. This rejection, in so far as it applies to the remaining claims, is respectfully traversed.

35 U.S.C. §102(a) states:

"A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent."

The present application was filed in the U.S. (by inventor Chang Nam Kim and Assignee LG Electronics of Seoul, Korea) on April 22, 2004, claiming priority to Korean Patent Application No. 28628/2003 filed in Korea on May 6, 2003. A certified copy of the Korean priority document will be filed to perfect the claim for priority. The Kim '139 patent (inventor also Chang Nam Kim and Assignee also LG Electronics of Seoul, Korea) was published in the U.S. on January 16, 2003.

This January 16, 2003 publication date is the earliest date by which the content of the Kim '139 patent was described in a printed publication, and/or could have been known or used by others in this country (the U.S.). However, 35 U.S.C. §102(a) requires that this content be available before the invention by the applicant for a patent. It is noted that the applicant for a patent in the present application (Chang Nam Kim) is the same as the applicant for a patent in

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the Kim '139 patent (also Chang Nam Kim). Thus, it is respectfully submitted that the Kim '139 patent is not a proper reference, and cannot be properly applied in a rejection of the present application under 35 U.S.C. §102(a).

It is further noted that the Kim '139 patent cannot be properly applied in a rejection of the present application under 35 U.S.C. §102(b). That is, 35 U.S.C. §102(b) requires that the invention be patented or described in a printed publication more than one year prior to the date of application for patent (May 6, 2002, or one year prior to the May 6, 2003 priority date of the present application). The Kim '139 patent's January 16, 2003 publication date is after May 6, 2002, and thus the Kim '139 patent cannot be properly applied under 35 U.S.C. §102(b).

Additionally, the Kim '139 patent cannot be properly applied in a rejection of the present application under 35 U.S.C. §102(e). That is, 35 U.S.C. §102(e) requires that the invention be described in an application filed by another, or a patent granted to another. However, the present application and the Kim '139 patent are both filed by the same inventor (Chang Nam Kim). Thus, the Kim '139 patent cannot be properly applied under 35 U.S.C. §102(e).

For at least these reasons, it is respectfully submitted that independent claim 11 is allowable over Kim, and thus the rejection of independent claim 11 under 35 U.S.C. §102(b) over Kim should be withdrawn. Dependent claim 37 is allowable at least for the reasons set forth above with respect to independent claim 11, from which it depends, as well as for its added features.

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C. Yamamoto

The Office Action rejects claims 11, 20-22, 24, 26, 29-34 and 36-41 under 35 U.S.C. §102(a) over U.S. Patent No. 5,079,477 to Yamamoto (hereinafter "Yamamoto"). Claims 22, 36, 38 and 39 have been cancelled. This rejection, in so far as it applies to the remaining claims, is respectfully traversed.

The features of independent claims 11 and 29 are as set forth above. Yamamoto neither discloses nor suggests the features of independent claims 11 and 29, or the respective claimed combinations of features.

Yamamoto discloses various embodiments of slot type shadow masks. As with Im, the shadow masks disclosed by Yamamoto are for use with a CRT, and thus not comparable to the claimed mask for use during deposition of a luminescent layer of an organic electroluminescent device. However, even if improperly applied, Yamamoto still neither discloses nor suggests a mask having a plurality of holes or strip-type slots as recited in independent claims 11 and 29, respectively.

Yamamoto discloses a slot type shadow mask 3 including front and rear plates 4a and 4b that are joined together to form a single plate member 4. Longitudinal slots 5a and 5b divided by bridges 6a and 6b are formed on opposite outside surfaces S1 and S2 of the plates 4a and 4b, respectively. Each of the slots 5a and 5b extend conically through its respective plate 4a and 4b (see column 4/lines 3-5 of Yamamoto). Each of the slots 5a has a single angled surface through which a beam passes as shown by the arrow lines B in Figure 3 of Yamamoto. Likewise, each of

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the slots 5b has a single angled surface. Corresponding slots 5a and 5b are mated to form a beam aperture 3A having a cross section as shown in Figures 5 and 6 of Yamamoto.

As shown in these cross sections, the resulting beam aperture 3A has a first angled surface that extends from the outer surface S1 of the front plate to an intermediary (inner) surface of the rear plate 4b, and a second angled surface that extends from the intermediary (inner) surface of the rear plate 4b to the outer surface S2 of the rear plate 4b. Yamamoto neither discloses nor suggests that that an inner peripheral edge of the beam apertures 3A includes only first and second angled surfaces as specifically recited in independent claims 11 and 29, let alone first and second angled surfaces as more specifically recited in newly added claims 43, 44 and 46.

Accordingly, it is respectfully submitted that independent claims 11 and 29 are not anticipated by Yamamoto, and thus the rejection of independent claims 11 and 29 under 35 U.S.C. §102(b) over Yamamoto should be withdrawn. Rejected dependent claims 20, 21, 24, 26, 29-34, 37, 40 and 41, as well as newly added dependent claims 42-46, are allowable at least for the reasons set forth above with respect to independent claims 11 and 29, from which they respectively depend, as well as for their added features.

II. New Claims 42-46

New claims 42-46 are added to the application. It is respectfully submitted that new claims 42-46 meet the requirements of 35 U.S.C. §112, and are allowable at least for the reasons

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set forth above with respect to independent claims 11 and 29, from which they respectively depend, as well as for their added features.

III. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned **Joanna K. Mason**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
KED & ASSOCIATES, LLP

Daniel Y.J. Kim
Registration No. 36,186
Joanna K. Mason
Registration No. 56,408

P.O. Box 221200
Chantilly, Virginia 20153-1200
(703) 766-3777 DYK/JKM/krf

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